



Free Sound Editor
PC and Mac Versions
<http://audacity.sourceforge.net>

Introduction to Audacity

Sound Editor

As a sound editor, Audacity can help you alter voice, music, and sound-effect files to suit your purposes. Want to eliminate *ums* or long pauses from a speech? Want to shorten a song and add a fade out? Want a cat to meow in time with a musical rhythm? Audacity can do all that and more. It can also, for example, record narration spoken into a microphone or audio streaming from the Internet.

Getting Sounds into Audacity

There are two fundamental ways to get sounds into Audacity—recording (capturing) “live” sound and opening (importing) existing sound files.

Recording

Audacity records almost any “live” audio that your computer can play or process. You can record sounds from various sources including the following:

- A microphone attached to your computer’s Microphone Input
- A sound device (mixer, tape player, turntable, etc.) connected to your computer’s Line Input
- A CD playing on your computer’s CD-ROM drive
- Software such as your computer’s Web browser (e.g., Internet Explorer) or media player
- The Stereo Mix setting associated with your computer’s sound card

Opening Sound Files

Audacity can Open existing sound files created in several common formats including the following:

- WAV
- MP3
- AIFF

Exporting Sound Files

Once you have edited a sound file to your satisfaction, Audacity can Export your audio in one of several common formats including the following:

- WAV
- MP3 (with the add-on LAME encoder library)
- AIFF

Not Supported

Audacity does not currently support WMA, AAC, or most other proprietary file formats, e.g., Real Audio.

Editing

Audacity offers easy-to-use and flexible editing features:

- Easy editing with Cut, Copy, Paste, and Delete
- Unlimited Undos
- Editing and mixing an unlimited number of tracks

Effects

Audacity can modify a sound file for clarity or customization:

- Pitch change without altering the tempo—and vice-versa
- Removal of static, hiss, hum, or other constant background noises
- Frequency altering with Equalization, FFT Filter, and Bass Boost effects
- Volume adjustment with Compressor, Amplify, and Normalize effects

Other built-in effects include the following:

- Echo
- Phaser
- Wahwah
- Reverse

Control Toolbar

Most of Audacity's commonly used tools are available on the Control Toolbar. This toolbar is composed of two distinct sections the Editing Tools and the Audio Control Buttons.



Editing Tools

These tools help you perform edits on sounds that appear in the Audio Track(s).



Selection tool - for selecting the range of audio you want to edit or listen to



Envelope tool - for changing the volume over time



Draw tool - for modifying individual samples



Zoom tool - for zooming in and out



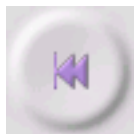
Time Shift tool - for sliding tracks left or right.



Multi-Tool Mode – for gaining access to all of the above tools at once depending on the location of the mouse and the keys you are holding down

Audio Control Buttons

These buttons help you control the recording and playback of sound.



Skip to Start - moves the cursor to time 0. If you press Play at this point, your project will play from the beginning.



Play - starts playing audio at the cursor position. If some audio is selected, only the selection is played.



Loop - If you hold down the Shift key, the Play button changes to a Loop button, which lets you play the selection over and over again.



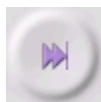
Record - starts recording audio at the project sample rate (the sample rate in the lower-left corner of the window). The new track will begin at the current cursor position, so click the "Skip to Start" button first if you want the track to begin at time 0.



Pause - temporarily stops playback or recording until you press pause again.



Stop - stops recording or playing. You must do this before applying effects, saving or exporting.

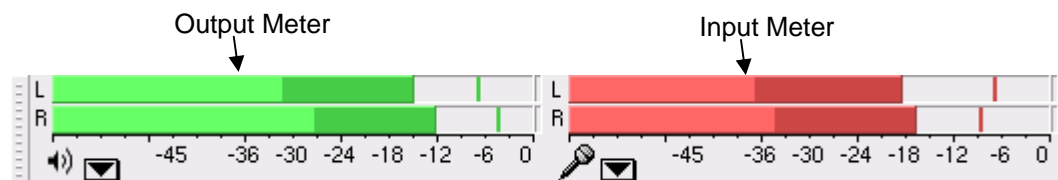


Skip to End - moves the cursor to the end of the last track.



Mixer Toolbar

The Mixer Toolbar has three controls that are used to choose the input source and to set the volume levels of your audio devices. The leftmost slider controls the playback volume, the other slider controls the recording volume, and the control on the right lets you choose the input source, such as Microphone, Line In, Audio CD, etc. It is important to understand that these controls are important when you record or playback a sound but have no effect on the audio volume levels when, for example, you Export or Save a project.

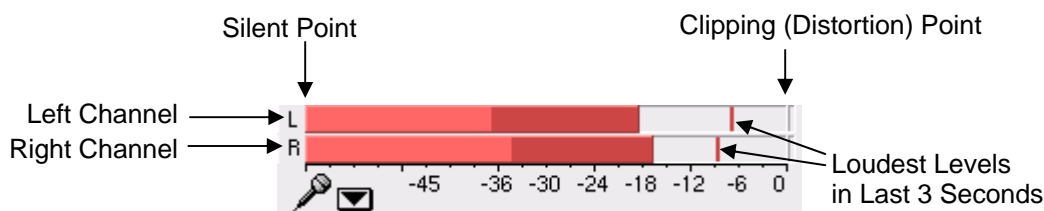


Meter Toolbar

The Meter Toolbar monitors the input and output audio levels and provide a visual indication of the current audio levels going in and out of Audacity. The toolbar allows you to make sure that the volume is as loud as possible—for maximum fidelity—without clipping or distorting the sound.

Normally the meters are only active when you are playing or recording audio. However, to test input levels before you start recording, select *Monitor Input* from the input meter's pop-up menu—or just click on the input meter.












Reading the Meter



Edit Toolbar

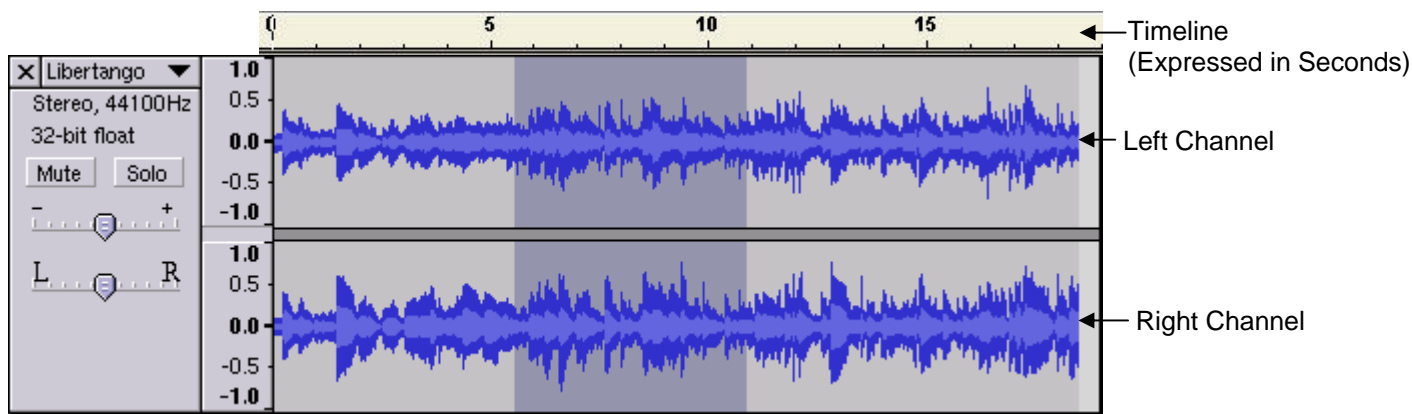


The buttons on this toolbar provide shortcuts to performing actions. Holding the mouse over a tool will reveal a ToolTip window to help you remember a tool's function.

-  Cut
-  Copy
-  Paste
-  Trim away the audio outside the selection
-  Silence the selected audio
-  Undo
-  Redo (repeat last command).
-  Zoom In
-  Zoom Out
-  Fit selection in window - zooms until the selection just fits inside the window.
-  Fit project in window - zooms until all of the audio just fits inside the window.

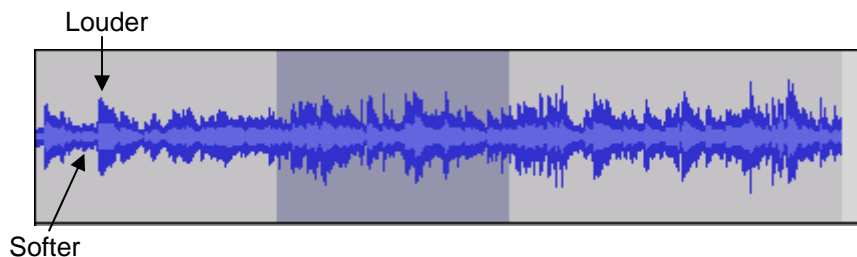
Audio Tracks

In Audacity, sounds appear in tracks as waveforms along a timeline. A single stereo sound file will have two tracks—one for the left channel and one for the right channel. Additional tracks for additional sounds may be added to an Audacity project. Typically, when a multi-track sound project is exported as, for example, an MP3 file, it is mixed down to a two-channel stereo sound file.



Waveform Display

Waveforms reveal sound characteristics like volume. The wider the waveform, the louder the sound. A sound's waveforms should be neither too wide nor too thin and should fit comfortably within the top and bottom edges of a track.

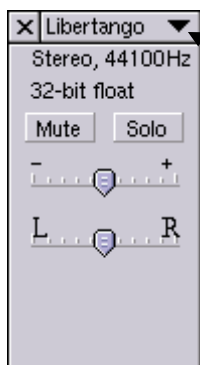


Good Waveform Pattern

- No waves pressing against top or bottom
- Average wave filling 20 to 70% of track

Track Controls

The track Control Panel appears directly to the left of every track.



To change various track options, click here for the Track Pop-Down Menu.